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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/555,402

11/02/2005

Norbert Struensee

23437

9441

535 7590 05/26/2010

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EXAMINER

DUONG, THO V

ART UNIT

PAPER NUMBER

3744

NOTIFICATION DATE

DELIVERY MODE

05/26/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

EMAIL@KFRPC.COM
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Office Action Summary	Application No. 10/555,402	Applicant(s) STRUENSEE, NORBERT	
	Examiner Tho v. Duong	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5,7,8,10-12,15-18,21,22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5,7,8,10-12,15-18,21,22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/15/10 has been entered.

Response to Arguments

Applicant's arguments filed 12/16/09 have been fully considered but they are not persuasive. Regarding the 112th rejection argument, applicant discloses that the clean version of specification filed 6/17/09 described the rejected subject matter. However, the clean version of specification filed 6/17/09 is not an original disclosure. The original disclosure filed 11/2/05 does not the claimed subject matter of “a superatmospheric pressure”. Applicant’s argument that reference to Kritzler fails to disclose that the air exiting from both separators. has been very carefully considered but is not found to be persuasive because Kritzler discloses that (figure 4) that sealing air projects through conductor (25) into a lower radial seal and exiting to a conductor (2) into an upper radial seal and out through an exit (28).

Specification

The amendment filed 6/17/09 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The subject matter of “superatmospheric pressure” on page 6, line 10 is not supported by the original disclosure.

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Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-5,7-8,10-12,15-18,21-22 and 24-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed subject matter of “pressurizing the housing around the periphery of the rotor with housing air at a superatmospheric pressure”, “means for pressurizing the housing around the periphery of the rotor with housing air at a superatmospheric pressure” are not supported by the original disclosure filed 11/2/2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 2-5,8,15,16,18 ,22 and 24-25 are rejected as obvious over Kritzler (US 5,577,551). Kritzler discloses (figure 4 and column 4, lines 21- column 6, line 23) a rotating heat exchanger with a rotatably mounted rotor (3), which has a first flow sector and a second flow sector for flowing of air in two directions (5,6); a housing (12) encloses the rotor at its periphery; the housing (12) surrounding the rotor and defining a first flow sector for axial front to rear flow through the rotor of air from the exterior and angularly offset from the first sector a second sector for axial rear to front flow through the rotor or air to the exterior; means (fan) for pressurizing the housing around the periphery of the rotor with housing air at an increased pressure in sealing space (13); peripheral seals (9) are arranged fixed in and between of the rotor (3) and the housing (12); the pressure of the sealing air are generated by an external pressure source (fan); front and rear separators (15,16) arranged running diametrically at the end faces of the rotor (3) between the two flow sectors; means for projecting sealing air from the separators (15,16) and thereby preventing mixing of air between the sectors (figure 4 shows sealing air projecting into the separators through conductor 25 into a lower radial seal exiting to conductor 2 into an upper radial seal and out through exit 28). Regarding the term superatmospheric pressure and claims 4,5 and 15-16, Kritzler discloses (column 4, line 65- column 5, line 5) that the means for pressuring the housing is a fan, which is to generate a reduced pressure or an increased pressure within the radial and peripheral seals. It would have been obvious to one having ordinary skill in the art that to have the increased pressure being a superatmospheric pressure (higher than atmospheric pressure) or higher than the pressure level of the airflows flowing through the rotor at a constant level or constant differential pressure so that the sealing air inside the peripheral seal and the radial seal can constantly prevent the atmospheric airflows or any airflow flowing

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through the sectors from across over the seals and mix together, which will reduce the heat transfer performance of the heat exchanger.

Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kritzler in view of Werke (DE 1170106B). Kritzler substantially discloses all of applicant's claimed invention as discussed above except for the limitation of a control and regulating device, which is capable of controlled or regulated according to a pressure sensor. Werke discloses (figures 1-2 and column 3, lines 4-23) a control and regulating device (9), which is capable of controlling an amount of air generated from a pressure source (7,8) pumping into a sealing band of a regenerative air heater according to a pressure sensor, for a purpose of effectively controlling the sealing of the heat exchanger. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Werke's teaching in Kritzler's device for a purpose of effectively controlling the sealing of the heat exchanger.

Claims 11-12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kritzler in view of Kraftanlagen (EP 0297230). Kritzler substantially discloses all of applicant's claimed invention as discussed above except for the limitation that a temperature regulating device and the airflow of the first sector is drawn to be used as a sealing air. Kraftanlagen discloses (figure 3) a rotating heat exchanger with a rotatably mounted rotor, which has a first flow sector and a second flow sector, a temperature-regulating device (38) is provided to regulate the temperature of the sealing air, wherein the sealing air is drawn from the airflow of the first sector for a purpose of removing of ice in the regenerative heat exchanger. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use

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Kraftanlagen's teaching in Kritzler's device for a purpose of removing of ice in the regenerative heat exchanger.

Allowable Subject Matter

The claimed subject matter of claims 10 and 26 are not found in the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tyler J. Cheryl can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tho v Duong/
Primary Examiner, Art Unit 3744

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